

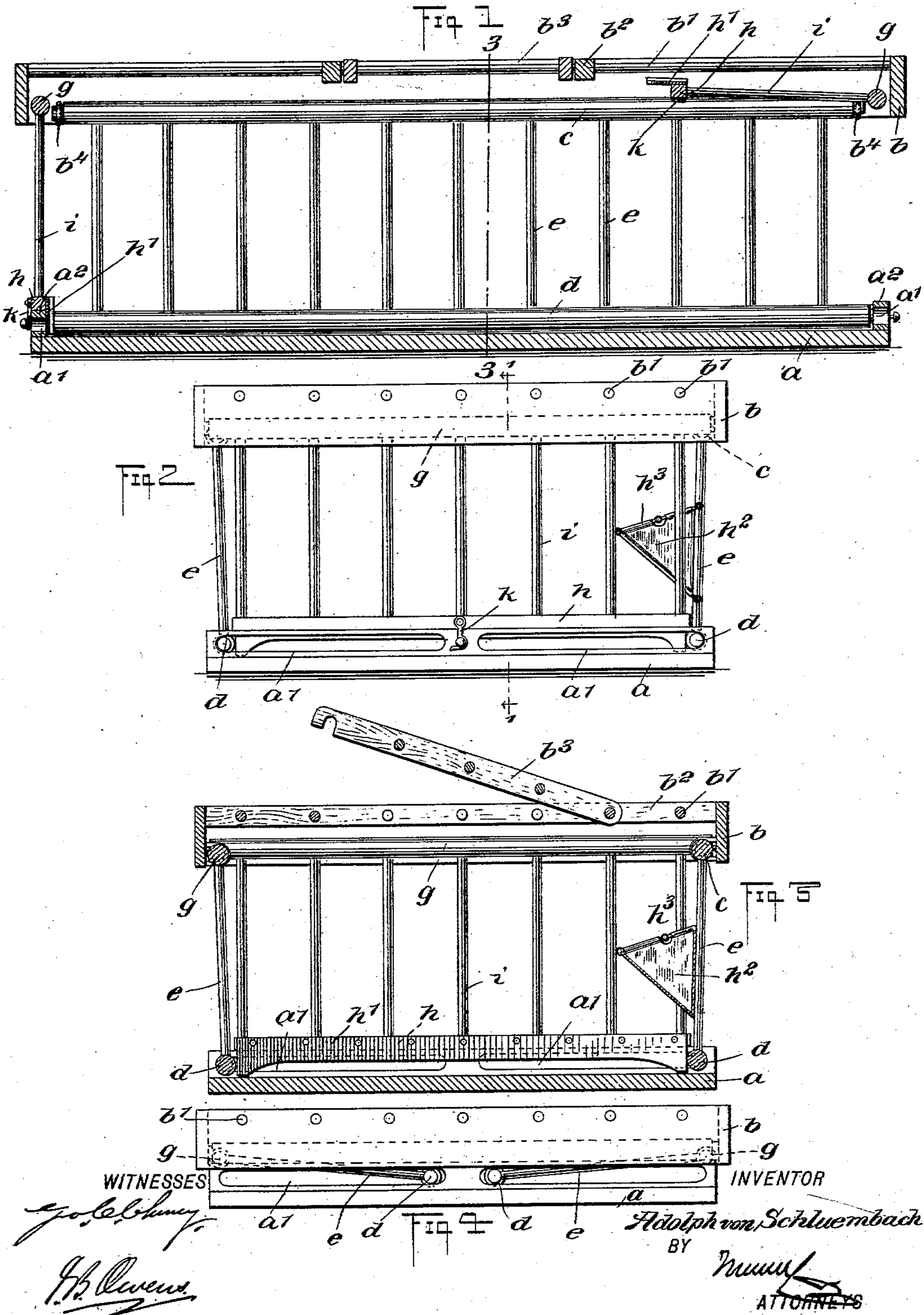
No. 694,794.

Patented Mar. 4, 1902.

A. VON SCHLUEMBACH.
CRATE.

(Application filed Mar. 15, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

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CRATE.

SPECIFICATION forming part of Letters Patent No. 694,794, dated March 4, 1902.

Application filed March 15, 1901. Serial No. 51,291. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH VON SCHLUEMBACH, a citizen of the United States, and a resident of Martinsburg, in the county of Blair and State of Pennsylvania, have invented a new and Improved Crate, of which the following is a full, clear, and exact description.

This invention relates to a crate especially adapted for carrying live fowls, the crate being constructed in a certain hereinafter-described peculiar manner which enables it to be folded when empty, so as to occupy a very much reduced space, thus facilitating the transportation of the empty crate.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional view of the invention on the line 1 1 of Fig. 2. Fig. 2 is an end elevation thereof. Fig. 3 is a section on the line 3 3 of Fig. 1, and Fig. 4 is an end elevation showing the crate closed.

The bottom of the crate is preferably constructed of an imperforate rectangular section of material, as indicated at *a*, and the top of the crate comprises an outer or marginal frame *b*, the parts of which are rigidly joined together, such frame having slats *b'* and strengthening cross-pieces *b''*, as indicated.

The top is provided with an opening for the introduction and removal of the fowls, and said opening is commanded by a suitable closure *b''*, hingedly mounted in place, as shown best in Fig. 3. The side walls of the crate are made up of top rails *c* and bottom rails *d*,

with slats *e* extending between them. The ends of the top rails *c* are mounted to rock in bearings *b''*, attached to the inner walls of the side portions of the marginal frame *b* of the top of the crate, and the ends of the bottom rails *d* are fitted to slide in transverse slots *a'*, formed in flanges or beads *a''*, fastened to the end edges of the bottom *a* of the crate. Now it will be seen that when the crate is extended, as shown in Figs. 1, 2, and 3, the rails *d* lie with their ends in the outer extremities of the slots *a'*. To fold the crate, the end walls are pushed inward at their lower portions, so

that the bottom rails *d* slide along the slots *a'* and occupy the positions shown in Fig. 4. This enables the top of the crate to come down to a position directly above the bottom.

The end walls of the crate are made up of top rails *g* and bottom rails *h*, joined together by slats *i*. The top rails *g* are rockably mounted in the end portions of the side members of the marginal frame *b* of the top of the crate, so that the end walls are free to swing from the normal or active position (shown at the left-hand end of Fig. 1) inward to the folded or horizontal position. (Shown at the right-hand

end of Fig. 1.) The bottom rails *h* of the end walls carry lock-plates *h'*, which are fastened to their inner sides and which when the end walls are in operative position lie between the lower or bottom rails *d* of the side walls to prevent the side walls from collapsing inward. This arrangement is best shown in Fig. 3.

When, therefore, the crate is opened, the parts lie as shown best in Fig. 3, and the lock-plates *h* bear between the bottom rails *d* of the said walls to prevent the collapse of the

crate. Any suitable devices—such, for example, as hooks *k*—may be employed for removably holding the end walls in operative position. When it is desired to knock down or fold the crate, the hooks *k* or other fastening devices used for the end walls should be released and the end walls moved inward to horizontal position, as explained above.

Then the bottom rails *d* of the side walls may be moved inward along the slots *a'* and the top of the crate will fall down into close proximity to the bottom. (See Fig. 4.) Any desired device (not shown) may be employed to hold the top and bottom sections of the

crate together when the crate is folded. If desired, a water-trough *h''*, of canvas or other waterproof fabric may be employed, as shown in Figs. 2 and 3. This trough is provided with a suitable jointed frame *h'''*, fastened to one of the walls of the crate, so that the trough may be folded when the crate is folded.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A folding crate comprising a bottom, a top provided with side and end sections depending therefrom, the end sections being

free to fold against the top, and the side sections being free to fold against the end sections as thus folded so that the side and end sections are free to open simultaneously, the
5 depending end sections serving as levers of variable power for unfolding the side sections.

2. A folding crate comprising a central flat member, a plurality of flat rigid sections flexibly connected therewith and free to fold
10 upon the same directly, and a plurality of flat rigid sections flexibly connected with said flat member at right angles to the first-mentioned sections, and free to fold upon them so that the first-mentioned sections in swing-
15 ing open serve as levers of variable power for opening the other sections.

3. A folding crate having top, bottom and side sections, each respectively rigid, the bottom section having guideways in its ends, the
20 side sections having swinging connections with the top section and having parts slidably engaging said guideways whereby said top, side and bottom sections may be folded, in combination with end sections pivoted to
25 the top section and folding inwardly against and parallel with the same and unfolding outwardly against and between the swinging

edges of the side sections so as to exert increasing leverage upon the same as the said ends are unfolded.

4. A folding crate, comprising a bottom, a top provided with side and end sections depending therefrom, the end sections being free to fold against the top and the side sections being free to fold against the end sections, and a fastening for securing said end sections, when unfolded, to said top section.

5. A folding crate, comprising a top, a bottom provided with slots, end members pivoted to said top and free to fold flatly against the same, side members pivoted to said top and free to fold flatly against said end members, said side members being provided with pins for slidably engaging said slots in said bottom, the arrangement being such that said
40 crate is free to open when the said end members are pulled asunder.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADOLPH VON SCHLUEMBACH.

Witnesses:

H. H. LYKENS,

THEO. D. SMUBERGER.